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ABSTRACT

The Student Descriptor Scale (SDS) was developed as a validation measure to determine whether students described and counted by states as "severely handicapped" were, indeed, students with severe disabilities. The SDS addresses nine characteristics: intellectual disability, health impairment, need for toileting assistance, upper torso motor impairment, lower torso motor impairment, communication disorder, environmental responsivity, sensory impairment, and behavior disorder. Use of the scale involves a 10-minute observation of the student while engaged in an instructional activity and a brief interview with the teacher. Results of reliability and validity testing indicate that students reported in state child count data as "severely disabled" did indeed fit that description. The four characteristics judged most strongly and consistently discriminative were found to be: (1) independence in toileting, (2) ambulation impairment, and (3) impairment in communication linked with (4) estimates of intellectual function. A copy of the SDS and the teacher interview questions is included, along with descriptions of two sample students and their completed SDS forms. (Contains 12 references.) (JDD)

STUDENT DESCRIPTOR SCALE MANUAL

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STUDENT DESCRIPTOR SCALE MANUAL

A number of authors have noted the failure of the literature addressing best practices for students with severe disabilities to reference students with profound disabilities (Brown et al., 1986; Snell & Browder, 1986; Wilcox, 1986). Sailor et al. (1988), in a comprehensive review of the literature concerning students with the most severe disabilities, concluded that a major difficulty in evaluating the literature on this dimension is the absence of any reliable and valid basis for partitioning the literature. In assessing the effectiveness and validity of "best practices," including full inclusion (Stainback & Stainback, 1990) and integrated, community-intensive instructional models (Sailor et al., 1989), different authors have used different criteria to describe this target population, including the presence of "profound" disabilities in student descriptors (Brown et al., 1986), or use of the term "students with severe multiple handicaps" (Gee et al., 1987, 1990).

Concurrently with an emerging focus upon inclusion of students with the most severe disabilities in research, practice, and demonstration activities, there has been continued federal commitment to programs serving students with severe disabilities in LRE contexts (Haring et al., 1990). In an in-depth analysis of placement patterns of students with severe disabilities in three different states, Haring et al. (1990) note that each state appears to utilize its own internal set of disability descriptors under the established Section 618 child count categories, with state-specific definitions for each. Thus, any attempt to track placement patterns of students with severe disabilities with respect to the question of LRE must also address the issue of which students reported using the current federal child count categories are, in fact, students with severe disabilities.

The Student Descriptor Scale (SDS) was jointly developed by CRI and IES in response to both of the above concerns. The California Research Institute (CRI) (G00 # 87C3056), a federally sponsored project on the integration of students with severe disabilities, has conducted a number of survey research efforts to determine current placement patterns of students with severe disabilities (cf. Haring et al., 1990). Validation that students described and counted by states as "severely handicapped" were, indeed, students with severe disabilities was one purpose in developing the scale. Integrated Educational Services (IES) (G00 # 08730421) is a federally sponsored demonstration project serving students with the most severe disabilities. The SDS was also developed to offer a reliable method for describing the students served by the project, who had all been identified as "most severely handicapped" through a variety of clinical measures.

Using the SDS

Table 1 presents the SDS scoring sheet. The SDS consists of nine characteristics: intellectual disability, health impairment, need for toileting assistance, upper torso motor impairment, lower torso motor impairment, communication disorder, environmental responsivity, sensory impairment, and behavior disorder. Based upon a ten-minute observation of the student while engaged in an instructional activity, each characteristic is checked as present or absent. Those characteristics that are present are rated on a 1-6 Likert scale according to the degree of the characteristic, with 1 = moderate and 6 = profound. After the observation, a brief interview is conducted with the teacher. Four standardized questions are asked concerning characteristics that may not be observable during the 10-minute observation sample. Based upon the teacher's verbal responses, scores on these 4 items may be adjusted.

Table 1

CRI/IES Student Descriptor Scale*

Rater's Name_____ Classroom Teacher:_____

Date: _____ Location: _____

Student: _____Age: ___

Activity #: _____

Directions: Ask teacher to assign code to each student you're going to observe. Observe each student for at least 10 consecutive minutes and check all of the following that apply. For those items a-i that you check, mark on the 1-6 scale the degree of the item. 1 = moderate; 6 = profound.

	Mod. Prof.		
-----	1 2 3 4 5 6	(a)	intellectually disabled
-----	1 2 3 4 5 6	(b)	presence of a health condition requiring care/attention during school hours (e.g., gastrotomy tube, catheter, seizure medications or seizure management, suctioning, etc.)
-----	1 2 3 4 5 6	(c)	assistance required in using the toilet (needs assistance in <u>any</u> aspect of toileting)
-----	1 2 3 4 5 6	(d)	upper torso motor impairment (needs assistance and/or adaptations to participate)
-----	1 2 3 4 5 6	(e)	ambulation impairment (needs assistance in mobility, including adaptations such as a walker or an electric wheelchair)
-----	1 2 3 4 5 6	(f)	impairment in communicative behavior
-----	1 2 3 4 5 6	(g)	impairment in responding to environmental stimuli (such as sound, movement, light)
-----	1 2 3 4 5 6	(h)	sensory impairment (visual or auditory reflected in adaptations, such as glasses, or behavior)
-----	1 2 3 4 5 6	(i)	behavior disorder (has behavior problems which require systematic intervention techniques for their reduction)

After you have finished observing, complete brief interview with teacher and adjust ratings on b, c, h, i as needed.

_____ Mark here if A is not checked.

*This instrument was designed for research purposes only and is inappropriate for any other use.

Table 1 continued

SDS Interview Questions

For each student you observe, ask the teacher the following questions (use exact wording).

1) Does (student code) have a health condition (such as tube, catheter, seizure monitoring/medications) that requires attention during school hours?

2) Briefly describe for me how (student code's) toileting needs are met.

3) Does (student code) have a documented vision or auditory impairment? Could you briefly describe it?

4) Does (student code) have any behavior problems that require systematic intervention techniques?

As teacher answers each question, revise your Likert score for the item if you need to, based on this additional information.

Scoring criteria. All raters using the SDS during its development held teaching certification in the severe disabilities area and/or a master's degree or Ph.D. in education/social services; all had worked in classrooms serving students with severe disabilities for a minimum of three years. Specific scoring guidelines for each numerical indictor associated with each characteristic were not developed. Instead, each rater was asked to consider a "moderate" and a "profound" degree of each characteristic based on her own experience and familiarity with the literature. Raters were then instructed to use their own clinical judgment in assessing degree of severity on the Likert scale when observing individual students. Seven raters then were grouped in random pairs and used the scale in several different classrooms. After each 10-minute observational period, the two raters discussed scoring criteria with each other and reached consensus. This process continued until each pair reached .80 agreement on two scoring sheets without the need for further discussion to achieve consensus.

Table 2 presents a completed scoring sheet for Michael.

Michael is a 6-year-old boy observed while making a classroom snack through activation of a switch-adapted blender. Since he had no usable vision, his available means of receiving information were through hearing, tactile gestures and other cues touched to his body, and movement. Michael has partial control over primarily one physical movement, which is a head turn to the right. This movement is influenced by a strong atonic neck reflex; however, Michael has learned to control this movement in order to activate contingent switch-operated toys, and other items. He is able to bring his arms into extension at times, but does not use his arms or hands functionally.

Table 2

CRI/IES Student Descriptor Scale*

Rater's Name Cox Classroom Teacher: Oshira

Date: 5/18/89 Location: Meadows Elementary

Student: Michael Age: 6

Activity #: Making snack

Directions: Ask teacher to assign code to each student you're going to observe. Observe each student for at least 10 consecutive minutes and check all of the following that apply. For those items a-i that you check, mark on the 1-6 scale the degree of the item. 1 = moderate; 6 = profound.

	Mod. Prof.		
✓	1 2 3 4 (5) 6	(a)	intellectually disabled
✓	1 2 3 (4) 5 6	(b)	presence of a health condition requiring care/attention during school hours (e.g., gastrotomy tube, catheter, seizure medications or seizure management, suctioning, etc.)
✓	1 2 3 4 5 (6)	(c)	assistance required in using the toilet (needs assistance in any aspect of toileting)
✓	1 2 3 4 (5) 6	(d)	upper torso motor impairment (needs assistance and/or adaptations to participate)
✓	1 2 3 4 (5) 6	(e)	ambulation impairment (needs assistance in mobility, including adaptations such as a walker or an electric wheelchair)
✓	1 2 3 4 (5) 6	(f)	impairment in communicative behavior
✓	1 2 3 (4) 5 6	(g)	impairment in responding to environmental stimuli (such as sound, movement, light)
✓	1 2 3 4 5 (6)	(h)	sensory impairment (visual or auditory reflected in adaptations, such as glasses, or behavior)
-----	1 2 3 4 5 6	(i)	behavior disorder (has behavior problems which require systematic intervention techniques for their reduction)

After you have finished observing, complete brief interview with teacher and adjust ratings on b, c, h, i as needed.

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Michael turns his head to the right and roll his eyes upward in response to familiar voices and events. His changes in affect (such as crying, calming, and laughing) are additional ways in which he nonsymbolically communicates. Michael at times demonstrates dislikes through crying and/or extreme screaming; however, numerous ecological and functional assessments have yielded no consistent antecedents to his extreme changes in state and his prolonged (sometimes as long as two weeks) episodes of crying which are often felt to be due to illness, pain, or other health variables. Some of the things Michael's educational program focuses on include eating and drinking skills, participation in the 3rd grade, leisure skills, participation in household and personal care activities, social skills and building friendships. No known attempts to systematically train communication skills have been successful for Michael.

Eight of the nine characteristics measured by the SDS were present on Michael's scoring sheet. All of the characteristics were scored at 4 or above, with many characteristics scored 5. Though Michael had little voluntary movement in his upper torso, for example, he was able to activate the switch-adapted blender when the adaptation was placed in the appropriate location. In comparison, a 6 was scored for the sensory impairment characteristic because Michael was blind.

Table 3 presents an SDS scored for Nedd.

Nedd is a 7-year-old boy who has Down Syndrome. Nedd was observed in a general education classroom in small group work. He wears glasses and uses his vision well. Nedd has lots to say but is very difficult to understand and becomes frustrated when he cannot make himself understood. When he is frustrated he will throw his glasses and yell or hit. He is very social but often is

CRI/IES Student Descriptor Scale*

Rater's Name Graham

Date: 11/28/90

Classroom Teacher: Price

Location: LeConte Elementary

Student: Nedd Age: 8

Activity #: _____

Directions: Ask teacher to assign code to each student you're going to observe. Observe each student for at least 10 consecutive minutes and check all of the following that apply. For those items a-i that you check, mark on the 1-6 scale the degree of the item. 1 = moderate; 6 = profound.

	Mod. Prof.		
✓	1(2)3 4 5 6	(a)	intellectually disabled
-----	1 2 3 4 5 6	(b)	presence of a health condition requiring care/attention during school hours (e.g., gastrotomy tube, catheter, seizure medications or seizure management, suctioning, etc.)
✓	(1)2 3 4 5 6	(c)	assistance required in using the toilet (needs assistance in any aspect of toileting)
-----	1 2 3 4 5 6	(d)	upper torso motor impairment (needs assistance and/or adaptations to participate)
-----	1 2 3 4 5 6	(e)	ambulation impairment (needs assistance in mobility, including adaptations such as a walker or an electric wheelchair)
✓	1(2)3 4 5 6	(f)	impairment in communicative behavior
-----	1 2 3 4 5 6	(g)	impairment in responding to environmental stimuli (such as sound, movement, light)
✓	(1)2 3 4 5 6	(h)	sensory impairment (visual or auditory reflected in adaptations, such as glasses, or behavior)
✓	1(2)3 4 5 6	(i)	behavior disorder (has behavior problems which require systematic intervention techniques for their reduction)

After you have finished observing, complete brief interview with teacher and adjust ratings on b, c, h, i as needed.

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inappropriate and sometimes yells and hits kids on the playground or in the regular ed classroom.

He has a picture book and a conversation book is being developed for him. He is able to paste but more difficult fine motor tasks such as cutting and paper and pencil work are difficult for him. He currently works with a reinforcer behavior management system. At the beginning of each work session he chooses the picture of what he would like to work for (bunny [the class has a bunny], book or a play car). After he works he gets 5 minutes with what he has chosen. Nedd uses the bathroom, eats, runs and plays independently. Receptively, Nedd follows directions and picks up routines quickly.

Nedd demonstrated five of the nine characteristics measured by the SDS. None of them were scored higher than 2. A score of 1 for sensory impairment reflected the fact that Nedd wears glasses; a score of 2 for behavior disorder reflected a successful positive management program for 5-minute intervals of work behavior.

Reliability. Seven trained observers who were randomly paired gathered interrater reliability data on a sample of 42 students in six different programs--5 special day classrooms integrated into regular education elementary school campuses, and one self-contained adult day program located in the community. Participants observed ranged in age from 3 to 38 years. Following procedures used by Dunlap & Koegel (1980) in the development of a reliable Likert scale for measuring affect, if the two observers rated within $\pm$ one point of each other, an agreement was counted. Reliability for the entire scale was calculated with the formula (# agreements/# agreements + disagreements). Mean reliability was .83 (range .50-100); median and mode scores were both .88.

Validity. A concurrent validity check was conducted with the Scales of Independent Behavior (SIB), (Bruininks, Woodcock, Weatherman, & Hill, 1984).

The SIB is a wide-age-range comprehensive set of tests for measuring functional independence in motor development, language, self-help, and community adaptation. The test is individually administered through a structured short form (32 item) interview with the teacher of each individual student with severe disabilities. Test/interview time is approximately 10 minutes. Following the SIB scoring protocol, cluster difference scores are obtained, with a lower score indicating less independence, and a higher score indicating more independence.

A sample of 76 randomly selected elementary school age students (5-13 years old) with severe disabilities was used to gather an estimate of concurrent validity. All students attended either full inclusion (n=32) or integrated special day class (n=44) programs. Correlation between cluster difference scores of the SIB and SDS scores for this group was -.769, indicative of strong concurrent validity between the two measures.

Outcomes

As part of an in-depth analysis of placement patterns of students with severe disabilities in 3 different states, Haring et al. (in press) reported SDS outcomes from a random sample of 126 students with severe disabilities who were being served in both integrated and segregated settings. The outcomes are shown in Table 4. These data suggest that for this sample, students reported in state child count data as severely disabled did indeed fit that description. Again, within this sample, the four characteristics judged most strongly and consistently discriminative were found to be independence in toileting ($\bar{x}$ = 4.10), ambulation impairment ($\bar{x}$ = 3.77), and impairment in communication ($\bar{x}$ = 3.59) linked with estimates of intellectual function ($\bar{x}$ = 3.18). While these data are descriptive and not inferential in nature, they provide a useful basis for further research and discussion related to identifying

the population of students labeled "severely disabled" (cf. Fredericks & Baldwin, 1987).

Table 4

Student Descriptor Scale Mean Scores

		CA n = 41	State 2 n = 63	State 3 n = 22	N = 126
a.	int. dis.	3.02	3.18	3.50	3.18
b.	health condition	2.33	2.59	2.77	2.57
c.	toilet assist.	4.05	4.19	3.89	4.10
d.	upper torso imp.	2.65	3.41	2.73	3.09
e.	ambul. imp.	3.79	3.83	3.56	3.77
f.	comm. beh. dis.	3.20	3.81	3.65	3.59
g.	environ. resp.	2.56	3.00	1.82	2.60
h.	sensory imp.	2.65	3.10	2.10	2.83
i.	behavior dis.	2.56	2.97	2.59	2.74
		2.98	3.34	2.96	3.16

From Haring, K., Farron-Davis, F., Goetz, L., Zeph, L., Karasoff, P., & Sailor, W. (in press). LRE and the placement of students with severe disabilities. Journal of the Association for Persons with Severe Handicaps.

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